origin here, and concludes that it is not indigenous, but must have been set out by some botanist. As, however, it still persists after twenty-two years left entirely to Nature's care, and manifests no tendency to decrease in either numbers or vigor, I incline to the opinion of Mr. Higginson, that it originated here through natural agencies, probably from wind-sown spores, long antecedent to its discovery. The plants grow in the crevices on one rock, which is only six feet through at the base, and five feet high. The fronds do not possess the luxuriant growth exhibited in its natural habitat, the largest fronds being nine to ten inches long, and five-eighths inch wide at base, with little disposition to produce auricles, or to root at the tips.

Lygodium palmatum, Swartz. This rare fern grows in Dover, adjoining Needham, where I have collected beautiful, fully fruited specimens. It occupies a small space in a shrubby pasture, the fronds climbing principally on Spiraea salicifolia.

## FLORA OF THE POCONO PLATEAU.

THOMAS C. PORTER.

Rhodora is certainly a well-chosen name for the journal of the New England Botanical Club, both because of its euphony and because borrowed from a genus of plants represented by a solitary species, and that a hardy shrub which produces unique and beautiful flowers. And yet, this shrub, immortalized by Emerson in verse, is not, as some might suppose, confined to New England, for it exists elsewhere, in Canada and northern New York, and has, besides, a range much farther south. On the Pocono Plateau, embracing the western half of Monroe County, Pennsylvania, and portions of the adjioning counties, it flourishes in many places and when in full bloom, early in June, along with the Azalea canescens of Michaux, fills the swamps and open woods with a glorious display. The latter sometimes attains the height of ten feet and is readily distinguished from the allied A. nudiflora by its hoary leaves and the single set of short gland-tipped hairs on the tube of the corolla.

The Pocono region, as well as the mountains to the north, south and west of it, has an elevation of from 2000 to 2300 feet above the sea, and hence its mean annual temperature is nearly that of the Adirondacks and Mount Desert Island. Lying, too, within the great bowlderline, it has been the theatre of immense glacial action, the results of

which are evident in vast accumulations of drift and numerous ponds, lakes and sphagnum-bogs. Its flora, therefore, is largely northern in its character and the conditions being very favorable to the growth of the shrubby Ericaceae, other companions of the Rhodora appear, such as Ledum Groenlandicum (L. latifolium, Ait.), Kalmia glauca, Andromeda polifolia, Cassandra calyculata, Chiogenes hispidula (C. serpyllifolia, Salisb.), Vaccinium Canadense and Vaccinium Oxycoccus. Amongst the trees and other shrubs, Picea Mariana (P. nigra, Link), Abies balsamea, Larix laricina (L. Americana, Michx.), Myrica Gale, Betula populifolia, Pyrus Americana, Nemopanthes Canadensis (Nemopanthus fascicularis, Raf.) and Viburnum lantanoides abound, whilst Pinus resinosa, Betula papyrifera and Lonicera caerulea are scarce and local.

The following list of seventy additional species, most of which, as far as known, do not occur further south, will best exhibit the northern character of the flora. It might be increased and, if the whole territory in the State, above the bowlder line, were included, the number could be more than doubled:—

Eriophorum vaginatum Botrychium simplex Carex pauciflora B. lanceolatum B. matricaria C. oligosperma Dryopteris Braunii C. retrorsa (Aspidium aculeatum, Swartz, C. Schweinitzii var. Braunii, Koch) C. Goodenovii (C. rigida, Good., var. Goode-D. simulata novii, Bailey) (Aspidium simulatum, Daven-C. limosa port)

Potamogeton Oakesiana

Scheuchzeria palustris

Panicum xanthophysum

Oryzopsis juncea

(O. Canadensis, Torr.)

Milium effusum

Cinna latifolia (C. pendula, Trin.)

C. Magellanica

C. longirostris

C. arctata

C. deflexa

C. pallescens

C. chordorhiza

C. chordorhiza

C. Deweyana

Avena striata C. Deweyana
Poa debilis Calla palustris
Panicularia laxa Xyris montana

(Glyceria laxa, Scribner) (X. flexuosa, Muhl., var. pu-Agropyron caninum silla, Gray) Juncus filiformis

Vagnera trifolia

(Smilacina trifolia, Desf.)

Streptopus roseus

S. amplexifolius

Trillium undulatum

(T. erythrocarpum, Michx.) Rubus strigosus

Clintonia borealis

Habenaria hyperborea

Listera cordata

Microstylis monophyllos

Razoumofskya pusilla

(Arceuthobium pusillum,

Peck)

Polygonum cilinode

Stellaria borealis

Arenaria Groenlandica

Nymphaea Kalmiana

(Nuphar minimum, Smith)

N. rubrodisca

(Nuphar advena, Ait. f., var. Aster acuminatus

minus, Morong)

Trollius laxus

Mitella nuda

Ribes lacustre

R. prostratum

Potentilla tridentata

P. argentea

P. palustris

R. triflorus

R. neglectus

Dalibarda repens

Amelanchier oligocarpa

Oxalis Acetosella

Viola Selkirkii

Hypericum boreale

Naumburgia thyrsiflora

(Lysimachia thyrsiflora, L.)

Gentiana linearis

Menyanthes trifoliata

Linnaea borealis

Lobelia Dortmanna

A. Radula

Hieracium Canadense

A remarkable feature of the flora, worthy of note, is the occurrence, with these northern and mountain species, of so many plants that have their chief home on the lowlands of the coast. Of these a brief list is given: -

Woodwardia Virginica

Lygodium palmatum

Lycopodium inundatum

Eleocharis olivacea

Scirpus Torreyi

S. subterminalis

Carex Collinsii

(C. subulata, Michx.)

C. albolutescens

Orontium aquaticum

Eriocaulon septangulare

Peltandra Virginica

(P. undulata, Raf.)

Pontederia cordata

Juncus pelocarpus

Juncus militaris

Aletris farinosa

Amianthium muscaetoxicum

Habenaria blephariglottis

Polygonum Carevi

Myriophyllum tenellum

Rhexia Virginica

Proserpinaca palustris

Limnanthemum lacunosum

Utricularia purpurea

Utricularia cornuta

But the same thing has been observed also at much higher altitudes in the southern states, and it surprises the botanist to find on the summits of Table Rock and Roan Mountain in North Carolina the Zygadenos leimanthoides, Xerophyllum asphodeloides and Leiophyllum buxifolium which he had collected on the sandy flats of New Jersey.

## NOTES ON MAINE PLANTS.

## ELMER D. MERRILL.

THE following notes on Maine plants may be of interest to students of the flora of that state. Several of the plants enumerated below have never before been listed from the state, and others reëstablish localities for species which have been previously reported, but for which the locality has been lost.

The few species listed from Mt. Ktaadn are added more especially because of the interest of the locality. During a trip there in September, 1898, about fifty of the typical alpine and subalpine forms of that region were collected, which have previously been reported by Scribner, Bot. Gaz. 14: 46, Briggs, Bull. Torr. Bot. Club, 19: 334, and other collectors.

The grasses of the following list were named by Professor Scribner.

Isoetes echinospora Braunii (Durieu) Engelm. Abundant in shallow water and partly emersed. Three Ponds, Mt. Ktaadn, September, 1898. Altitude about 2,000 feet.

Oryzopsis melanocarpa Muhl. Growing abundantly on rocky wooded hillsides. East Auburn, August, 1898. Not previously reported from the state.

Panicum macrocarpon LeConte. East Auburn, June, 1896, and July, 1898. Reported as P. macrocarpon Torr, by F. L. Harvey in Bull. Torr. Bot. Club, 25: 211.

Panicum tsugetorum Nash. Pastures, East Auburn, July, 1898. A form referred to this species by Professor Scribner. P. implicatum Scribn. and P. boreale Nash were again collected at this locality in July, 1898.

Polygonum Zuccarinii Small (P. cuspidatum, Sieb. & Zucc.). Waste places, Basin Mills, Orono. Escaped from cultivation, and very persistent.

Alsine borealis (Bigel.) Britton (Stellaria borealis Bigel.). Near a